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This index covers all technical items - papers, correspondence, reviews, etc. - that appeared in this periodical during 1997, and items from previous years that were commented upon or corrected in 1997.

The Author Index contains the primary entry for each item, listed under the first author's name, and cross-references from all coauthors. The Subject Index contains several entries for each item under appropriate subject headings, and subject cross-references.

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$In_{0.52}(Al,Ga)_{0.48}As/In_{0.53}Ga_{0.47}As$ heterojunction HEMT. *Yi-Jen Chan*, + , *T-ED May 97* 708-714
$In_{0.53}Ga_{0.47}As$ MSM photodiodes with transparent CTO Schottky contacts and digital superlattice grading. *Gao, W.*, + , *T-ED Dec 97* 2174-2179
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GaAs/AlGaAs MODFET readout cct. for quantum-well IR detector FPA. *Umansky, V.*, + , *T-ED Nov 97* 1807-1812
$GaAs/Al_xGa_{1-x}As$ quantum well IR photodetector FPA camera. *Gunapala, S.D.*, + , *T-ED Jan 97* 45-50
$GaAs/Al_xGa_{1-x}As$ quantum well IR photodetector hand-held camera. *Gunapala, S.D.*, + , *T-ED Jan 97* 51-57
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Infrared image sensors
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$GaAs/Al_xGa_{1-x}As$ quantum well IR photodetector FPA camera. *Gunapala, S.D.*, + , *T-ED Jan 97* 45-50
$GaAs/Al_xGa_{1-x}As$ quantum well IR photodetector hand-held camera. *Gunapala, S.D.*, + , *T-ED Jan 97* 51-57
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Infrared transducers
$PbTiO_3$ ferroelec. thin-film IR opt. diode, num. anal. *Chen, F.Y.*, + , *T-ED Jun 97* 937-942

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Insulated gate FETs; cf. MISFETs

Insulated gate transistor switches
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Integrated circuit bonding; cf. Wafer bonding

Integrated circuit design
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CMOS act. pixel sens., on-chip successive approx. ADC. *Zhimin Zhou*, + , *T-ED Oct 97* 1759-1763
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CMOS, fully-depleted-SOI MOSFETs, Ta-gate, low-temp. proc. *Ushiki, T.*, + , *T-ED Sep 97* 1467-1472
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Si/SiGe mm-wave ICs, CMOS on FZ-high resist. substr., readout electronics. *Beck, D.*, + , *T-ED Jul 97* 1091-1101
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Integrated circuit design; cf. Integrated circuit layout

Integrated circuit doping
BSIM3v3 phys./scalable I-V model for MOS analog/digital cct. simul. *Yuhua Cheng*, + , *T-ED Feb 97* 277-287

Integrated circuit doping; cf. Integrated circuit ion implantation

Integrated circuit fabrication
AlGaAs/GaAs 2-DEG mixer on quartz substr., 94 GHz, fab. *Basco, R.*, + , *T-ED Jan 97* 11-16
CMOS act. pixel sens., frame-transfer, with pixel binning. *Zhimin Zhou*, + , *T-ED Oct 97* 1764-1768
CMOS-compatible organic LEDs, fab. and characts. *Heinrich, L.M.H.*, + , *T-ED Aug 97* 1249-1252
LSI low-k interlayer dielec., gas-dielec. proc. feasibility. *Anand, M.B.*, + , *T-ED Nov 97* 1965-1971
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Integrated circuit fabrication; cf. Integrated circuit bonding; Integrated circuit doping; Integrated circuit metallization; Isolation technology

Integrated circuit interconnections
CMOS cct. speed, ring oscillators, interconnect loading effects. *Kai Chen*, + , *T-ED Sep 97* 1556-1558
CMOS ring oscillator speed, gate oxide, voltage scaling and interconnect loading effects. *Chen, K.*, + , *T-ED Nov 97* 1951-1957
influence of TiN ARC thickness on stress-induced void form. in tungsten-plug vias. *Walls, J.A., T-ED Dec 97* 2213-2219
jn. isolated HVICs, interconnection-induced breakdown volt. optim. *Murray, A.F.J.*, + , *T-ED Jan 97* 185-189
mixed-mode cct. simul., full-wave anal. of interconnections. *Ciampolini, P.*, + , *T-ED Nov 97* 2098-2105
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VLSI device interconnects, etching/deposition simul., boundary movement. *Ze-Kai Hsiau*, + , *T-ED Sep 97* 1375-1385

Integrated circuit interconnections; cf. Aluminum integrated circuit conductors

Integrated circuit ion implantation
CMOS dual-polycide gate technol., lateral dopant diffusion suppression. *Koike, H.*, + , *T-ED Sep 97* 1460-1466
CMOS, submicron, LDD-only implanted F technol. *Mogul, H.C.*, + , *T-ED Mar 97* 388-394
EXTIGATE, proc. archit. for submicron CMOS technols. *Schwalke, U.*, + , *T-ED Nov 97* 2070-2077
MOS devices, proc.-induced gate oxide damage, cct. simulator. *Tu, R.*, + , *T-ED Sep 97* 1393-1400
MOS ICs, plasma immersion ion implant., oxide charging, waveform effects. *Ee, W.G.*, + , *T-ED Mar 97* 379-387
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$Si_{1-x}Ge_x$, polycryst., low-temp. annealing after dopant implant. *Zhonghe Jin*, + , *T-ED Nov 97* 1958-1964
$TiSi_2$ p$^+$/n MOS shallow jns. with a-Si/poly-Si buffer layer, Ge implant. *Cheng Tung Huang*, + , *T-ED Apr 97* 601-606
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Integrated circuit layout
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Integrated circuit measurements
CMOS act. pixel sens., on-chip successive approx. ADC. *Zhimin Zhou*, + , *T-ED Oct 97* 1759-1763
CMOS cct. degrad. anal., opt. meas. of substr. current. *Romano, G.*, + , *T-ED May 97* 910-912
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TiSi2 p+/n MOS shallow jns. with a-Si/poly-Si buffer layer, Ge implant. *Cheng Tung Huang*, + , *T-ED Apr 97* 601-606
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Integrated circuit metallization; cf. Aluminum integrated circuit conductors

Integrated circuit modeling
AlSi submicrometric interconnect lines, LF noise, resist. fluct. *Neri, B.*, + , *T-ED Sep 97* 1454-1459
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charge modulation device image sens., block/skip access capability. *Nomoto, T.*, + , *T-ED Oct 97* 1738-1746
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p-i-n/HBT OEIC receiver, bit-rate/sensitivity limits, SPICE simul. *Moon Jung Kim*, + , *T-ED Apr 97* 551-558
a-Si photoconversion layer overlaid CCD imager, random noise supress. *Nakamura, N.*, + , *T-ED Oct 97* 1663-1666
three-phase very high frame rate burst CCD image sens., design. *Kozonocky, W.F.*, + , *T-ED Oct 97* 1617-1624

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CMOS, fully-depleted-SOI MOSFETs, Ta-gate, low-temp. proc. *Ushiki, T.*, + , *T-ED Sep 97* 1467-1472
CMOS inverter, NMOS AC hot-carrier lifetime prediction algm. *Kim, S.W.A.*, + , *T-ED Apr 97* 651-658
CMOS output transistors, area-efficient layout design. *Ming-Dou Ker*, + , *T-ED Apr 97* 635-645
CMOS SRAM technol., 0.5-μm, ESD protection for output pad with well-coupled field-oxide device. *Chau-Neng Wu*, + , *T-ED Mar 97* 503-505
current-mode act. pixel sens., on-focal-plane sig. proc. *Nakamura, J.*, + , *T-ED Oct 97* 1747-1758
influence of TiN ARC thickness on stress-induced void form. in tungsten-plug vias. *Walls, J.A.*, *T-ED Dec 97* 2213-2219
layered lines, electromigration current distrib./resist. changes, 1D model. *Grosjean, D.E.*, + , *T-ED May 97* 744-750
MOS devices, proc.-induced gate oxide damage, cct. simulator. *Tu, R.*, + , *T-ED Sep 97* 1393-1400
SWATT cell technol. for reliable multi-level NAND EEPROMs. *Aritome, S.*, + , *T-ED Jan 97* 145-152

Integrated circuits; cf. Application specific integrated circuits; Bipolar integrated circuits; FET integrated circuits; High-speed integrated circuits; Large-scale integration; Power integrated circuits

Integrated circuit testing
AC/DC wafer-level noise meas. syst. for electromigration noise. *Yassine, A.M.*, + , *T-ED Jan 97* 180-184
MOS test capacitors, plasma proc., oxide defects dens. *Hyungcheol Shin*, + , *T-ED Sep 97* 1554-1556

Integrated circuit thermal factors
CMOS, fully-depleted-SOI MOSFETs, Ta-gate, low-temp. proc. *Ushiki, T.*, + , *T-ED Sep 97* 1467-1472
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Si temp. micro-sens. based on thermo-optic effect. *Cocorullo, G.*, + , *T-ED May 97* 766-774

Integrated optoelectronics
GaInAs/InP planar photodiodes, monolithically integrated 1×12 array. *Wen-Jeng Ho*, + , *T-ED Apr 97* 559-564
p-i-n/HBT OEIC receiver, bit-rate/sensitivity limits, SPICE simul. *Moon Jung Kim*, + , *T-ED Apr 97* 551-558
SiGe PIN/MISS OEIC for high current photoreceiver appls. *Fang, Y.K.*, + , *T-ED Jan 97* 34-38
SiGe/Si selective epitaxial planar photodetector, Si-based OEIC. *Tashiro, T.*, + , *T-ED Apr 97* 545-550
smart CMOS image sens. arrays. *Schanz, M.*, + , *T-ED Oct 97* 1699-1705

Integrodifferential equations; cf. Boltzmann equation

Intelligent sensors
light-addressable potentiometric sens., modeling. *Colalongo, L.*, + , *T-ED Nov 97* 2083-2090

Interconnections; cf. Integrated circuit interconnections

Interface phenomena
BJT, polysilicon emitter, degrad. at high forward current densities. *Carroll, M.S.*, + , *T-ED Jan 97* 110-117
CMOS, submicron, LDD-only implanted F technol. *Mogul, H.C.*, + , *T-ED Mar 97* 388-394
GaAs-Ga_2O_3 interface, thermodyn. stabil. *Passlack, M.*, + , *T-ED Feb 97* 214-225
gate oxide of MOSFET, Fowler-Nordheim stress degrad. *Ling, C.H.*, + , *T-ED Apr 97* 681-683
in-depth exploration of Si-SiO_2 interface traps in MOS transistors using charge pumping tech. *Bauza, D.*, + , *T-ED Dec 97* 2262-2266
MOS capacitors, band bending and subband energies calc. *Mueller, H.H.*, + , *T-ED Sep 97* 1539-1543
MOSFET fab., high permittivity TiO_2 dielec. *Campbell, S.A.*, + , *T-ED Jan 97* 104-109

MOSFET, interface-trap lateral distrib., charge-pumping method. *Hsin-Hsien Li*, +, *T-ED May 97* 782-791
MOSFET, localized interface charge, threshold-voltage model. *Yuh-Sheng Jean*, +, *T-ED Mar 97* 441-447
NMOS and PMOS hot carrier effects from 300 to 77 K, comparison. *Song, M.*, +, *T-ED Feb 97* 268-276
nMOSFET, deep submicron, hot-carrier-induced degrad., mech. stress effect. *Degraeve, R.*, +, *T-ED Jun 97* 943-950
n-MOSFETs, oxide charge and interface states distribs. profiling. *Shui-Ming Cheng*, +, *T-ED Nov 97* 1908-1914
oxynitride thin gate dielec., growth by RTP, high field stressing effects. *Subrahmanyam, P.V.S.*, +, *T-ED Mar 97* 505-508
SiO_2 films, time-decay stress-induced leakage current, anal. *Sakakibara, K.*, +, *T-ED Jun 97* 1002-1008
a-SiC:H p-i-n thin-film LED, graded-gap jn., elec./luminesc. charactn. *Tean-Sen Jen*, +, *T-ED Apr 97* 565-571

Interface phenomena; cf. Heterojunctions; Inversion layers; Schottky barriers; Semiconductor-insulator interfaces; Semiconductor-metal interfaces

Interference; cf. Intersymbol interference

Interference suppression
current-mode act. pixel sens., on-focal-plane sig. proc. *Nakamura, J.*, +, *T-ED Oct 97* 1747-1758
a-Si photoconversion layer overlaid CCD imager, random noise supresss. *Nakamura, N.*, +, *T-ED Oct 97* 1663-1666

Interferometry; cf. Optical interferometry

Intersymbol interference
p-i-n/HBT OEIC receiver, bit-rate/sensitivity limits, SPICE simul. *Moon Jung Kim*, +, *T-ED Apr 97* 551-558

Inversion layers
effect of i-layer params. on perform. of Si n^+-i-n^+ homojunction far-IR detectors. *Yuan, H.K.*, +, *T-ED Dec 97* 2180-2186
high-field transport of inversion-layer electrons and holes. *Assaderaghi, F.*, +, *T-ED Apr 97* 664-671
MOS capacitors, band bending and subband energies calc. *Mueller, H.H.*, +, *T-ED Sep 97* 1539-1543
MOSFET behavior, inversion layer centroid effects, quantum model. *Lopez-Villanueva, J.A.*, +, *T-ED Nov 97* 1915-1922
MOSFET, scaled, universal mobility behavior, quantum-mech. model. *Vasileska, D.*, +, *T-ED Apr 97* 577-583
MOSFETs, gate-field depend. mobility degrad., distortion anal. *van Langevelde, R.*, +, *T-ED Nov 97* 2044-2052
MOS transistors, electron/hole mobility model, device simul. *Darwish, M.N.*, +, *T-ED Sep 97* 1529-1538
PMOSFET, hole inversion layers, quantum mech. effects, model. *Hareland, S.A.*, +, *T-ED Jul 97* 1172-1173
short-channel MOSFET, stepped doping profile, quasi-2D simulator. *Lopez-Villanueva, J.A.*, +, *T-ED Sep 97* 1425-1431
Si p-/n-MOSFET, deep submicron, charact., electron and hole quantization. *Jallepalli, S.*, +, *T-ED Feb 97* 297-303
Si scaled MOSFET, degrad. of total gate capacitance. *Vasileska, D.*, +, *T-ED Apr 97* 584-587
temp.-depend. MOSFET inversion layer carrier mobility model, device/cct. simul. *Baohong Cheng*, +, *T-ED Feb 97* 343-345

Inverters; cf. Pulse inverters

Ion implantation; cf. Integrated circuit ion implantation; Semiconductor device ion implantation

Ionization
multipactors, rf driven electron cascades, random secondary delay times. *Riyopoulos, S.*, +, *T-ED Mar 97* 489-497

Ionization; cf. Impact ionization

Iron
GaInP:Fe/GaInAsP/GaAs BH laser, RIE, SI regrowth. *Lourdudoss, S.*, +, *T-ED Feb 97* 339-340

Isolation technology
DRAM, 16 Mb, design and proc. technol. *Gi-Tae Jeong*, +, *T-ED Nov 97* 2064-2069
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fully-depleted SOI NMOSFET, lateral isolation, total dose effects. *Ferlet-Cavrois, V.*, +, *T-ED Jun 97* 965-971
ja. isolated HVICs, interconnection-induced breakdown volt. optim. *Murray, A.F.J.*, +, *T-ED Jan 97* 185-189
LMPS, dielec. isolated lateral merged PiN Schottky diodes. *Sunkavalli, R.*, +, *T-ED Nov 97* 2011-2016
self-aligned metal/in situ doped polysilicon bipolar technol. *Washio, K.*, +, *T-ED Nov 97* 2078-2082
SiGe HBT, self-aligned bipolar technol., bandgap narrowing, parasitic energy barriers. *Le Tron, B.*, +, *T-ED May 97* 715-722
6H-SiC planar MESFETs, V implanted channel termination. *Man Pio Lam*, +, *T-ED May 97* 907-910
SWATT cell technol. for reliable multi-level NAND EEPROMs. *Aritome, S.*, +, *T-ED Jan 97* 145-152
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Iterative methods
helical slow-wave structs., inhomog. loaded, rigorous tape anal. *Ghosh, S.*, +, *T-ED Jul 97* 1158-1168
MOSFETs, electron mobility, transverse/long.-elec. field. *Roldan, J.B.*, +, *T-ED Sep 97* 1447-1453

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JFETs
epitaxially-grown charge modulation device, JFET struct. *Reich, R.K.*, +, *T-ED Oct 97* 1672-1678

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Klystrons
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obituary. *Jindal, R.P.*, *T-ED May 97* 685
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Large-scale integration
high-speed CMOS LSIs, DRAMs, on-chip ESD protection. *Narita, K.*, +, *T-ED Jul 97* 1124-1130
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Large-scale integration; cf. Ultra-large-scale integration; Very-large-scale integration

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Semiconductor devices; cf. MSM devices; Power semiconductor devices; Quantum effect semiconductor devices; Semiconductor diodes; Semiconductor lasers; Semiconductor logic devices; Semiconductor waveguides; Transistors

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pn diodes, forward transient charge injection, anal. *Chudobiak, M.J.*, + , *T-ED Jan 97* 190-194
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SOI MOSFET, phys.-based dyn. thermal impedance model. *Brodsky, J.S.*, + , *T-ED Jun 97* 957-964
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a-Si:H/a-SiC:H three-color detector, adjustable threshold, transient anal. *Irrera, F.*, + , *T-ED Sep 97* 1410-1416
Transient analysis; cf. Circuit transient analysis
Transistors
depletion isolation effect of surrounding gate transistors. *Terauchi, M.*, + , *T-ED Dec 97* 2303-2305
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Transistors; cf. Bipolar transistors; FETs; Permeable base transistors; Phototransistors; Thin film transistors
Transition metal alloys; cf. Gold alloys
Transition metal compounds; cf. Cobalt compounds; Ruthenium compounds; Titanium compounds; Yttrium compounds
Transition metals; cf. Iron; Molybdenum; Ruthenium; Tungsten; Vanadium
Transmission line theory
SOI MOSFET EOS/ESD protection devices, heat flow anal. *Raha, P.*, + , *T-ED Mar 97* 464-471
Transmission line theory; cf. Waveguide theory
Traveling wave tubes
interact. gaps, klystrons and TWTs, elec. field representation. *Kanada, A.*, + , *T-ED Jan 97* 201-202
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SET combinat. logic device based on binary decision diag. *Asahi, N.*, + , *T-ED Jul 97* 1109-1116
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tunable photodetectors based on strain compensated GaInAsSb/AlGaAsSb MQWs grown by MBE. *Shi, Y.*, + , *T-ED Dec 97* 2167-2173
Tungsten
electro-explosive semicond. bridge devices, plasma electron dens. meas. *Jongdae Kim*, + , *T-ED Jun 97* 1022-1026
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W selective CVD film on Si, pretreatment technol., interface charact. *Kow-Ming Chang*, + , *T-ED May 97* 738-743
Tunnel diodes; cf. Resonant tunneling diodes
Tunneling
abrupt semicond.-semicond. heterojunctions, tunnel current. *Searles, S.*, + , *T-ED Nov 97* 1851-1856
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degrad. of tunnel-thin silicon dioxide films. *Grekhov, I.V.*, + , *T-ED Dec 97* 2307-2308
effect of i-layer params. on perform. of Si n^+-i-n^+ homojunction far-IR detectors. *Yuan, H.X.*, + , *T-ED Dec 97* 2180-2186
HBTs, abrupt, bandgap narrowing distrib. *Lopez-Gonzalez, J.M.*, + , *T-ED Jul 97* 1046-1051
hybrid Schottky-/pn-diode, nonideal contact, simul. *Schroeder, D.*, + , *T-ED Apr 97* 679-681
MOS capacitors, stress-induced leakage current mechanism, inelastic trap-assisted tunneling. *Rosenbaum, E.*, + , *T-ED Feb 97* 317-323
NMOSFET, submicron, electron gate current, thermionic emission model. *Hamat, K.*, + , *T-ED Jan 97* 129-138
polysilicon npn transistors, self-aligned, hot carrier degrad., oxide charge. *Neviani, A.*, + , *T-ED Nov 97* 2059-2063
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SiO_2 films, time-decay stress-induced leakage current, anal. *Sakakibara, K.*, + , *T-ED Jun 97* 1002-1008
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Si-SiO_2 MOS capacitors, gate-oxide induced charge, const.-current Fowler-Nordheim stress. *Tan Khai Nguyen*, + , *T-ED Sep 97* 1432-1440
SOI MOSFET, partially-depleted, tunneling source-body contact. *Chen, W.M.*, + , *T-ED Jul 97* 1143-1147
n^+ polysilicon, polyoxides, elec. charcts., polarity asymm. *Shye Lin Wu*, + , *T-ED Jan 97* 153-159
Tunnel transistors; cf. Resonant tunneling transistors
TV cameras
HDTV STACK-CCD imager, dark current fixed pattern noise reduction. *Sakaguchi, N.*, + , *T-ED Oct 97* 1658-1662
TV equipment; cf. TV cameras

U

UHF FETs
GaAs spike-gate power FET with high power-added efficiency, LV operation, 900 MHz. *Tanaka, T.*, + , *T-ED Mar 97* 354-359
UHF FETs; cf. UHF power FETs
UHF power FETs
GaInP/InGaAs/GaAs narrow-channel MODFETs, HF and power appls. *Perciaslavets, B.*, + , *T-ED Sep 97* 1341-1348
UHF transistors; cf. UHF FETs
Ultra-high-speed integrated circuits
self-aligned metal/n situ doped polysilicon bipolar technol. *Washio, K.*, + , *T-ED Nov 97* 2078-2082
Ultra-large-scale integration
3D MULSS, ULSI topography simulator, seq. proc. steps. *Fujinaga, M.*, + , *T-ED Feb 97* 226-238
CMOS, fully-depleted-SOI MOSFETs, Ta-gate, low-temp. proc. *Ushiki, T.*, + , *T-ED Sep 97* 1467-1472
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Si lateral field emission diodes, SIMOX wafer. *Jung-Hyeon Park, + , T-ED Jun 97* 1018-1021
Si microtips with in-plane lens, beam focusing charact., FEDs. *Py, C., + , T-ED Mar 97* 498-502
Vanadium
6H-SiC planar MESFETs, V implanted channel termination. *Man Pio Lam, + , T-ED May 97* 907-910
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chelate metal complexes, organic electroluminescent materials. *Hamada, Y., T-ED Aug 97* 1208-1217
double-layer organic electroluminescent device, starburst mol. *Itano, K., + , T-ED Aug 97* 1218-1221
multicolor-emitting organic EL diodes, vap.-deposited fluoresc. dye films. *Tada, N., + , T-ED Aug 97* 1234-1238
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Vapor deposition; cf. CVD
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Variational methods
Poisson's eqn., quasi-equilib. semicond., MOSFET appls. *Chang-Yeol Lee, + , T-ED Sep 97* 1507-1513
Very-large-scale integration
bipolar transistors, optimum collector width, max. f_{max}, high current densities. *Kumar, M.J., + , T-ED May 97* 903-905
BSIM3v3 phys./scalable I-V model for MOS analog/digital cct. simul. *Yuhua Cheng, + , T-ED Feb 97* 277-287
CMOS cct. speed, ring oscillators, interconnect loading effects. *Kai Chen, + , T-ED Sep 97* 1556-1558
computational CMOS image sens. on sens. compression. *Aizawa, K., + , T-ED Oct 97* 1724-1730
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interconnects, etching/deposition simul., boundary movement. *Ze-Kai Hsiau, + , T-ED Sep 97* 1375-1385
Millers approx. in VLSI and power bipolar transistors with reach-through collectors. *Kumar, M.J., + , T-ED Dec 97* 2305-2307
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submicron BiCMOS compatible HV NMOS/PMOS devices, design and charactn. *Yong Qiang Li, + , T-ED Feb 97* 331-338
temp.-depend. MOSFET inversion layer carrier mobility model, device/cct. simul. *Baohong Cheng, + , T-ED Feb 97* 343-345
VHF amplifiers
gate-controlled lateral PNP BJT, charcts., model, cct. appls. *Zhixin Yan, + , T-ED Jan 97* 118-128
Video signal processing
artificial retina chip, current-mode focal plane image proc. fns. *Funatsu, E., + , T-ED Oct 97* 1777-1782
Voltage
SWATT cell technol. for reliable multi-level NAND EEPROMs. *Aritome, S., + , T-ED Jan 97* 145-152
Voltage control
back-gated CMOS on SOI-with-act.-substr., dyn. threshold voltage control. *Yang, I.Y., + , T-ED May 97* 822-831
Voltage measurement
gas-discharge displays, surface glow discharge, breakdown voltage meas. *Rosenkranz, J., + , T-ED Jan 97* 58-63

W

Wafer bonding
opt. modulator prep. by Si micromachining and thermal bonding. *Zhaohua Xiao, + , T-ED Apr 97* 572-576
Waveguides; cf. Helical waveguides; Microstrip circuits; Semiconductor waveguides
Waveguide theory
CPW on thick dielec. over lossy substr., equiv. cct. model. *Jin-Su Ko, + , T-ED May 97* 856-861
helical slow-wave structs., inhomog. loaded, rigorous tape anal. *Ghosh, S., + , T-ED Jul 97* 1158-1168
Work function
organic EL devices, energy level alignment at organic/metal interfaces, UPS study. *Ishii, H., + , T-ED Aug 97* 1295-1301

X

X-ray astronomy detectors
AXAF, Advanced X-ray Astrophysics Facility, soft-X-ray CCD imagers. *Burke, B.E., + , T-ED Oct 97* 1633-1642
X-ray detectors; cf. X-ray astronomy detectors
X-ray image sensors
AXAF, Advanced X-ray Astrophysics Facility, soft-X-ray CCD imagers. *Burke, B.E., + , T-ED Oct 97* 1633-1642
X-rays
$Si_{1-x}Ge_x$, polycryst., low-temp. annealing after dopant implant. *Zhonghe Jin, + , T-ED Nov 97* 1958-1964

Y

Yield estimation
MOS test capacitors, plasma proc., oxide defects dens. *Hyungcheol Shin, + , T-ED Sep 97* 1554-1556
Yttrium compounds
YBaCuO, semicond., microbolometer arrays for room temp. IR imaging. *Jahanzeb, A., + , T-ED Oct 97* 1795-1801

Z

Zinc compounds
ZnS:Pr,Ce,F white-light emitting thin-film EL display device, micromachined struct. *Yun-Hi Lee, + , T-ED Jan 97* 39-44